

January 10, 2011

Tom Ring
Environmental Science Specialist
Montana Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59602

TransCanada PipeLines Limited 2700 Post Oak Blvd Suite 400 Houston, TX, USA 77056

tel 713-693-6460 fax 713-693-6498 email Stephen_Marr@transcanada.com web www.transcanada.com

Re: Keystone XL clarification regarding pipeline construction near active sage-grouse leks.

Dear Mr. Ring:

The Keystone XL project team (Keystone) understands that the Montana Department of Environmental Quality (MDEQ) and the Montana Fish, Wildlife and Parks (MFWP) met on December 10, 2010 to discuss Keystone's approach to pipeline construction near active sage-grouse leks, and the departments' responses to that approach. We appreciate your phone call to Mr. Bill Mitchem with Trow Consulting Engineers on the same date regarding this meeting and its outcome. Based on Bill Mitchem's notes, as well as a follow-up conversation between you, Bill Mitchem, and John Beaver of WESTECH Environmental Services, Inc. on December 13, 2010, it is Keystone's understanding that construction will be restricted between March 1 and June 15 in those portions of the Project that are within 3 miles of an active lek and also visible from the lek. Keystone appreciates MDEQ's and MFWP's concurrence that habitat and topography influence a project's effect on sage-grouse and that construction restriction buffers should be modified accordingly.

We would like to clarify a critical component of construction that was discussed among Keystone, MDEQ, and MFWP at our meeting on October 13, 2010 in Helena. During this meeting Keystone stated that should construction restrictions be implemented around active sage-grouse leks between March 1 and June 15, the Project would need a means of allowing equipment to pass-through a restricted lek buffer while minimizing impacts to sage-grouse. Consequently, Keystone stated that a pass-through within a restricted lek buffer was critical. Keystone recommended that equipment be allowed to pass-through a restricted lek buffer via the right-of-way to a point of the right-of-way outside the restriction subject to following conditions:

- 1. Equipment passing through a restricted lek buffer would travel along the permitted right-of-way as a single group.
- 2. Equipment would only pass through a restricted lek buffer between 10:00 am and 2:00 pm to avoid disturbing displaying birds during critical times of the day.



3. No pipeline construction would be allowed within the restricted lek buffer until after June 15.

Keystone understands that MDEQ and MFWP appreciated this issue and agreed that equipment would be allowed to pass-through a restricted lek buffer as described above. We would like to formally request that the pass-through language described above be incorporated into any specifications or conditions that are placed on the Project regarding minimizing impacts to sage-grouse pursuant to the Major Facility Siting Act (MFSA).

Should you have further questions on the above described procedure please contact Stephen Craycroft at 713-693-6467 or stephen_craycroft@transcanada.com. Thank you for your attention to this matter.

Sincerely,

Stephen N. Marr

Manager Phase IV, Keystone Pipeline

Environmental Specifications for the Keystone XL Project in Montana

April 2012

Pertinent sage-grouse specifications are outlined in red. These specifications were developed after agency review of the Keystone XL sage-grouse plan.

Appendix A: Sensitive Areas

The following provisions shall be followed to assist in the protection of biological resources during construction and operations:

- All vehicles, equipment, bridges, and matting that will be used in streams or
 wetlands must be washed and dried before entering the job site in order to reduce
 the chances of transporting aquatic nuisance species to Montana streams and
 wetlands. Likewise, hydrostatic test water from other states must not be
 discharged into Montana waters in order to reduce the chances for transporting
 aquatic nuisance species to Montana streams and wetlands.
- Prior to the start of construction, the OWNER shall conduct surveys to determine
 the locations of greater sage-grouse leks and the peak number of males in
 attendance at these leks within three miles of the facility, unless the facility is
 screened by topography. The OWNER shall use survey methods approved by
 DEQ, FWP, and BLM. Results of the surveys shall be presented to the STATE
 INSPECTOR.
- Prior to the start of construction within three miles of a greater sage-grouse lek, the OWNER shall also conduct surveys to determine the peak number of male greater sage-grouse at leks identified by FWP and BLM more than three miles from the facility, for use as a baseline in determining whether construction activities or presence of the pipeline has affected greater sage-grouse numbers.
- Pipeline construction within three miles of active greater sage-grouse leks in suitable nesting habitat not screened by topography from March 1 to June 15 is prohibited with the following exceptions:
 - a. The OWNER may pass equipment as a single group along the permitted right-of-way or approved location though a restricted lek buffer area.
 - b. Equipment will only pass through a restricted lek buffer between 10:00 am and 2:00 pm, to avoid disturbing displaying birds during critical times of the day.
 - c. If major grading is required to pass equipment along the permitted right-of-way or approved location, this grading will take place outside of the March 1 through June 15 restriction period.
 - d. As the equipment passes through the areas, if any large hummocks or rocks impede the travel lane, the lead dozer will lower its blade on the way through to move the obstruction to the side and/or smooth out any larger hummocks or rocks.
- The OWNER shall conduct surveys of sharp-tailed grouse leks prior to construction using methods approved by DEQ in consultation with FWP, to detect leks that can be seen from the construction ROW and associated power lines. Results of the surveys shall be presented to the STATE INSPECTOR.

• Construction within 0.25 mile of active sharp-tailed grouse leks that can be seen from the construction ROW is prohibited from March 1 to June 15. This same timing restriction applies to routine maintenance. It does not apply when emergency maintenance or response is required for safe operation of the Project.

During the construction and reclamation period, the following exceptions will apply:

- a. The OWNER may pass equipment as a single group in the construction right-of-way or on an offsite access route that crosses a restricted lek buffer area.
- b. The equipment may only pass through the restricted lek buffer area between 10:00 am and 2:00 pm to avoid disturbing displaying birds during critical times of the day.
- c. Grading of the construction right-of-way or of the offsite access route is prohibited from March 1 through June 15.
- d. As the equipment passes through a restricted lek buffer area, the lead dozer may lower its blade to move to the side rocks that impede the travel lane or to smooth out hummocks that impede the travel lane.
- The OWNER shall contact BLM and FWP to determine what mitigation measures are needed for a lek found within the construction ROW and implement those measures.
- In sagebrush habitat, the OWNER will reduce the mound left over the trench in areas where settling would not present a path for funneling runoff down slopes.
 In these areas additional measures shall be taken to compact backfilled spoils to reduce settling.
- The OWNER shall establish a compensatory mitigation fund to be used by DEQ, BLM, and FWP to enhance and preserve sagebrush communities for greater sagegrouse and other sagebrush-obligate species in eastern Montana. The size of the fund will be based on the acreage of silver sagebrush and Wyoming big sagebrush habitat disturbed during pipeline construction within greater sage-grouse core habitat mapped by FWP and important habitat between approximate mileposts 96.5 to 130.5. For each acre disturbed, the OWNER shall contribute \$600 to the fund.
- During operations, inspection flights shall be limited to afternoons from March 1 to June 15 as practicable in sagebrush habitat designated by FWP (considering weather conditions and federal inspection requirements).
- The OWNER shall fund a study under the direction of DEQ, FWP, and BLM that would show whether the presence of the facility has affected greater sage-grouse numbers, based on the peak number of male greater sage-grouse in attendance at leks. For a period of four years, the agencies shall annually monitor, compare, and report the peak number of male greater sage-grouse at three leks within three miles of the pipeline that are not screened by topography, to the number of males

in attendance at three leks more distant than three miles from the facility, before and after construction of the pipeline. At the end of this four year period, DEQ, FWP, and BLM will determine whether there has been a change in the number of male greater sage-grouse in attendance. If there is a decrease, the OWNER will be required to increase the numbers of greater sage-grouse elsewhere to offset the observed reductions. Documented greater sage-grouse population increases as a result of expenditures from the compensatory mitigation fund, above, may be used to fulfill this requirement.

- The OWNER shall implement reclamation measures (e.g., application of mulch or compaction of soil after broadcast seeding, and reduced seeding rates for non-native grasses and forbs) that favor the establishment of silver sagebrush and big sagebrush in disturbed areas, where compatible with the surrounding land use and habitats, unless otherwise requested by the affected LANDOWNER.
- Prior to construction, the OWNER shall conduct studies along the route to identify areas that support stands of big sagebrush and silver sagebrush and incorporate these data into reclamation activities to prioritize re-establishment of sagebrush communities, as required above.
- Unless otherwise requested by the LANDOWNER, in areas supporting stands of
 big sagebrush and silver sagebrush, the OWNER shall monitor establishment of
 sagebrush on reclaimed areas annually for at least four years to ensure that
 sagebrush plants become established at densities similar to densities in adjacent
 sagebrush communities, and implement additional seeding or plantings of
 sagebrush if necessary. Reports of this monitoring activity shall be submitted to
 the DEQ annually.
- The OWNER and DEQ shall establish criteria in conjunction with FWP and BLM to determine when reclamation of sagebrush communities has been successful, based on the pre- and post construction studies described above. This shall not relieve the OWNER of its responsibility to meet the revegetation standards in Appendix B.
- Unless requested by the affected LANDOWNER, the OWNER shall use locally adapted sagebrush seed, collected within 100 miles of the areas to be reclaimed.
- To protect nesting for Sprague's pipit, a sensitive species in Montana, if construction will occur during the April 15 to July 15 grassland ground-nesting bird nesting season, nest-drag surveys must be completed by the OWNER to determine the presence or absence of nests on lands in Phillips and Valley counties, and implement timing restrictions recommended by USFWS and MFWP. Results of the surveys shall be presented to the STATE INSPECTOR.
- To minimize destruction of mountain plover nests and disturbance of breeding mountain plovers, no construction, reclamation, or other non-emergency ground disturbing activities will occur from April 10 to July 10, unless surveys conducted by the OWNER consistent with the Plover Guidelines or other methods approved by the USFWS find that no plovers are nesting in the area. Suitable mountain plover habitat in Fallon and Valley counties along the approved route must be